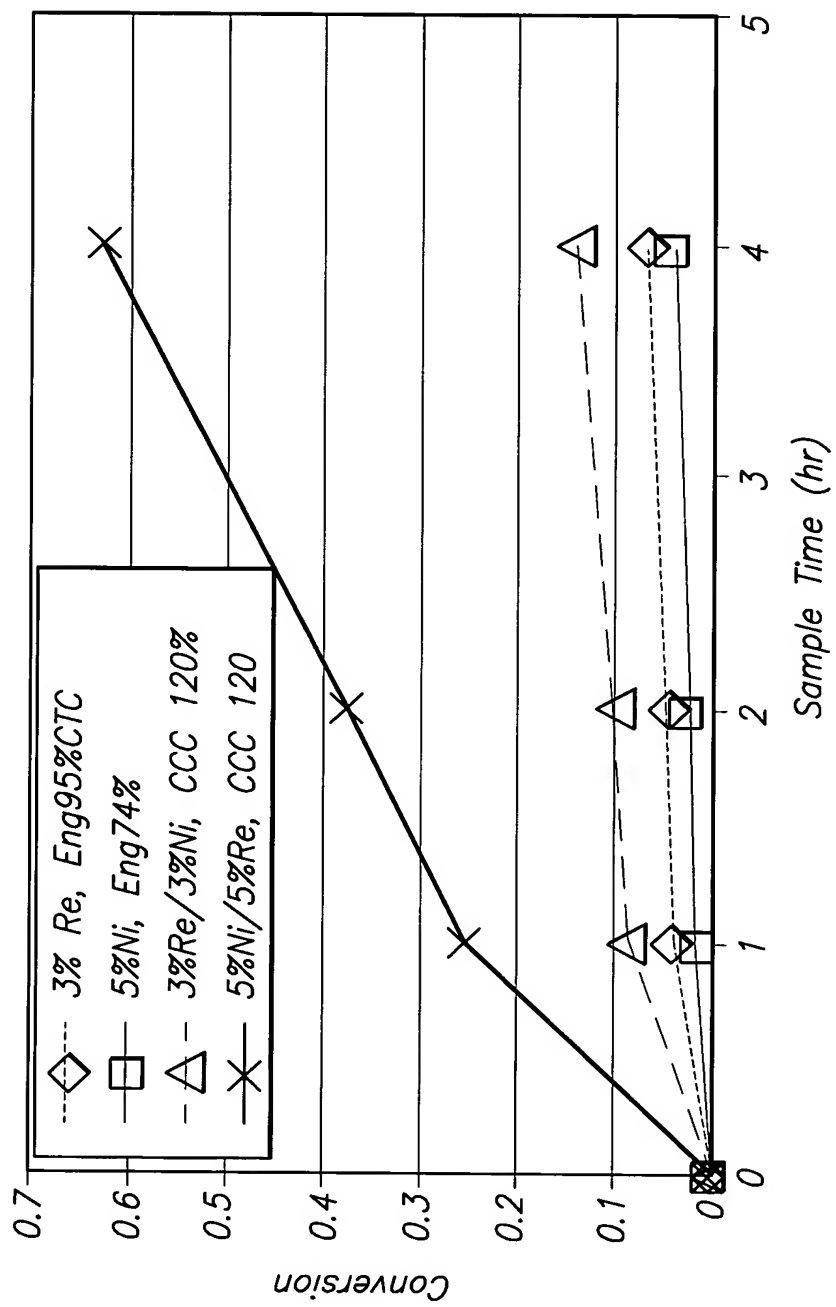
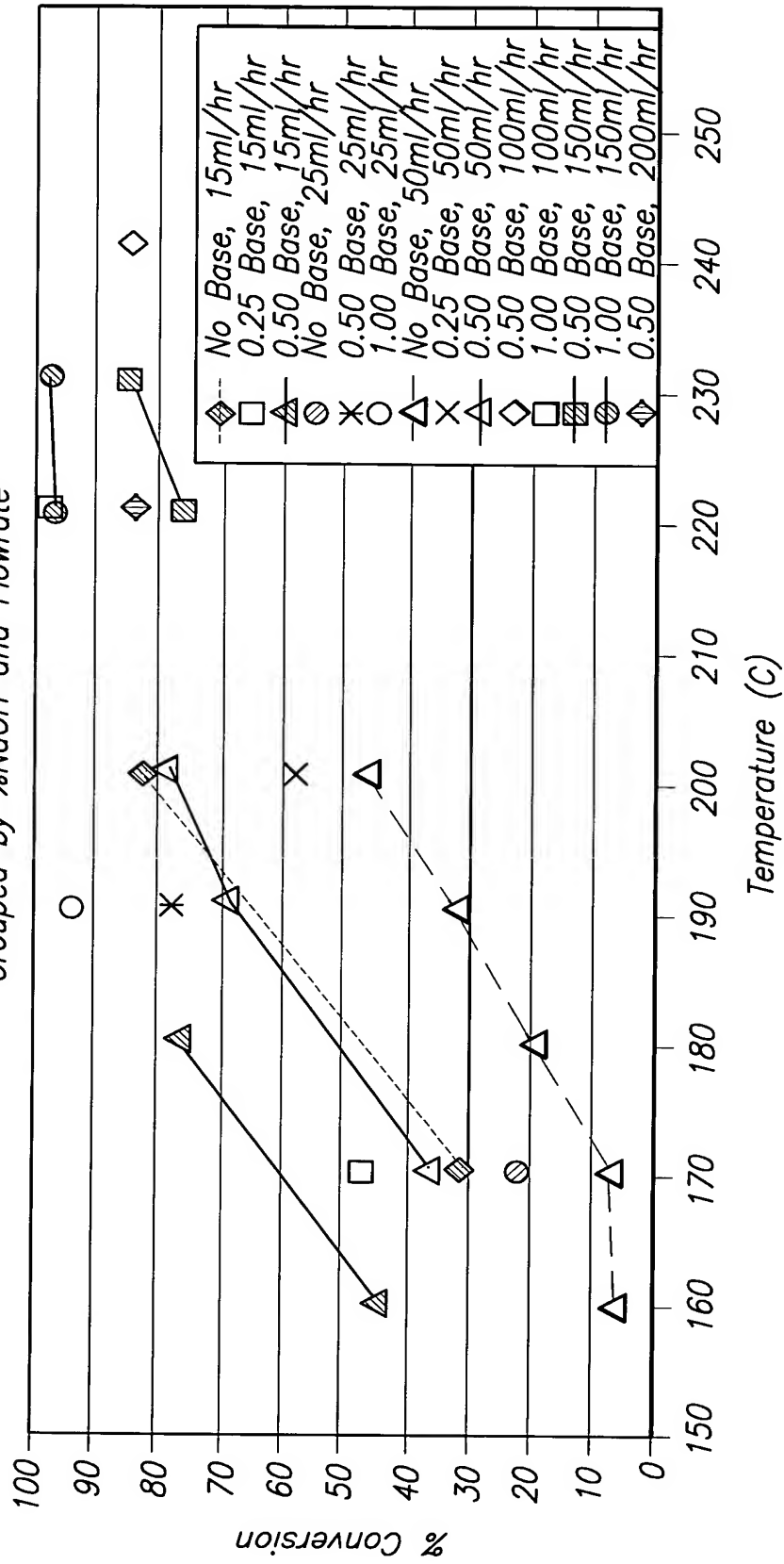


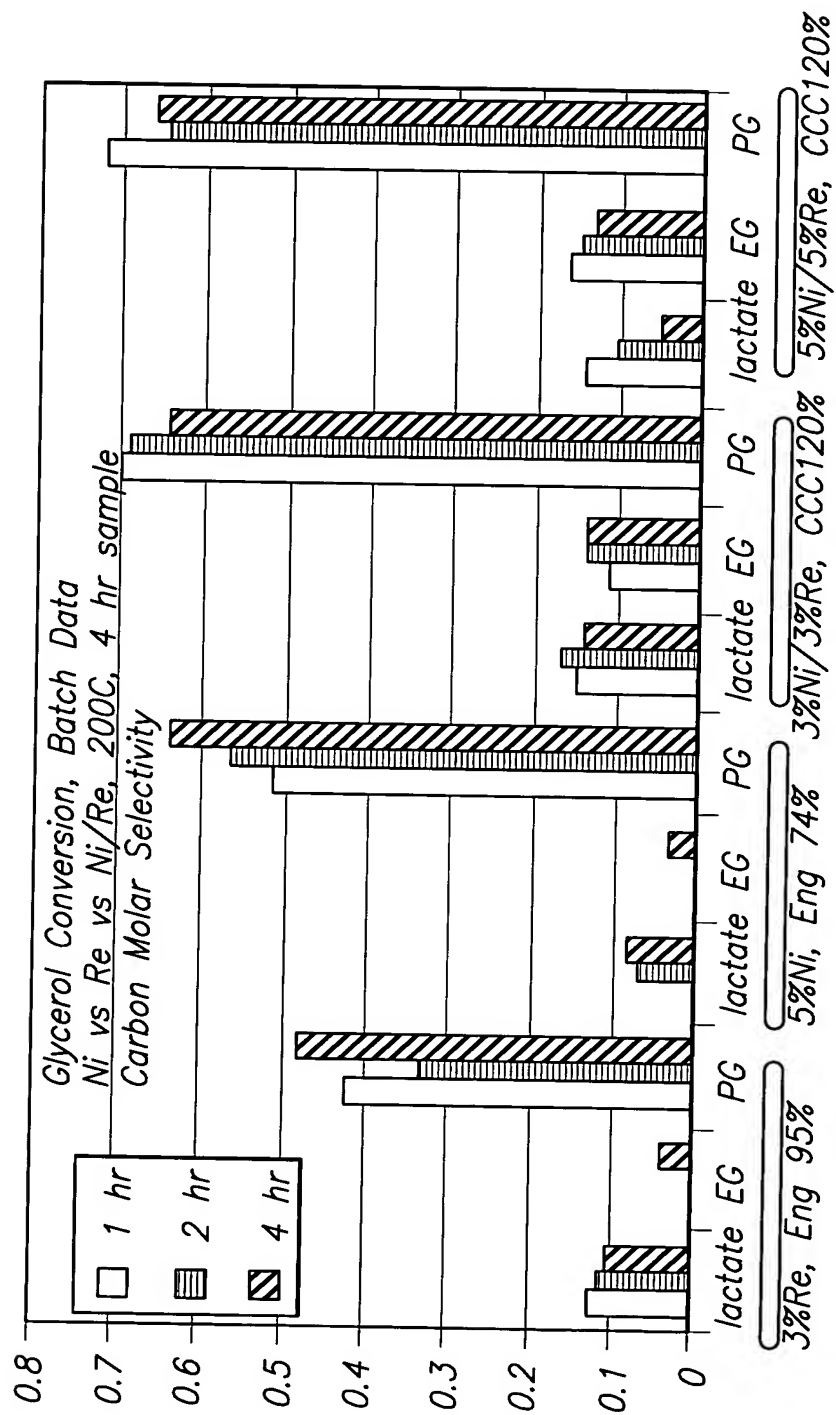
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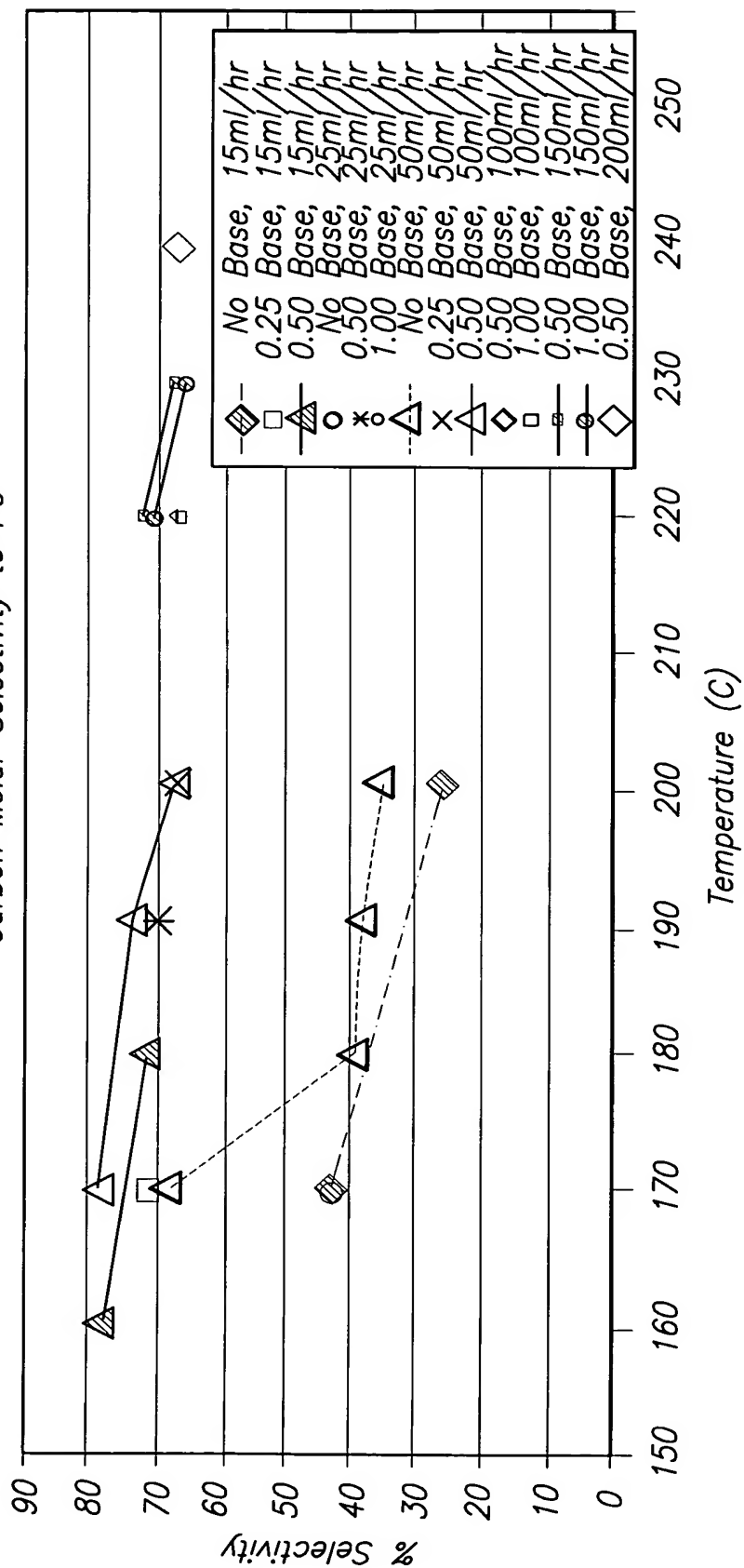
Glycerol Flow Reactor Conversion
Grouped by %NaOH and Flowrate



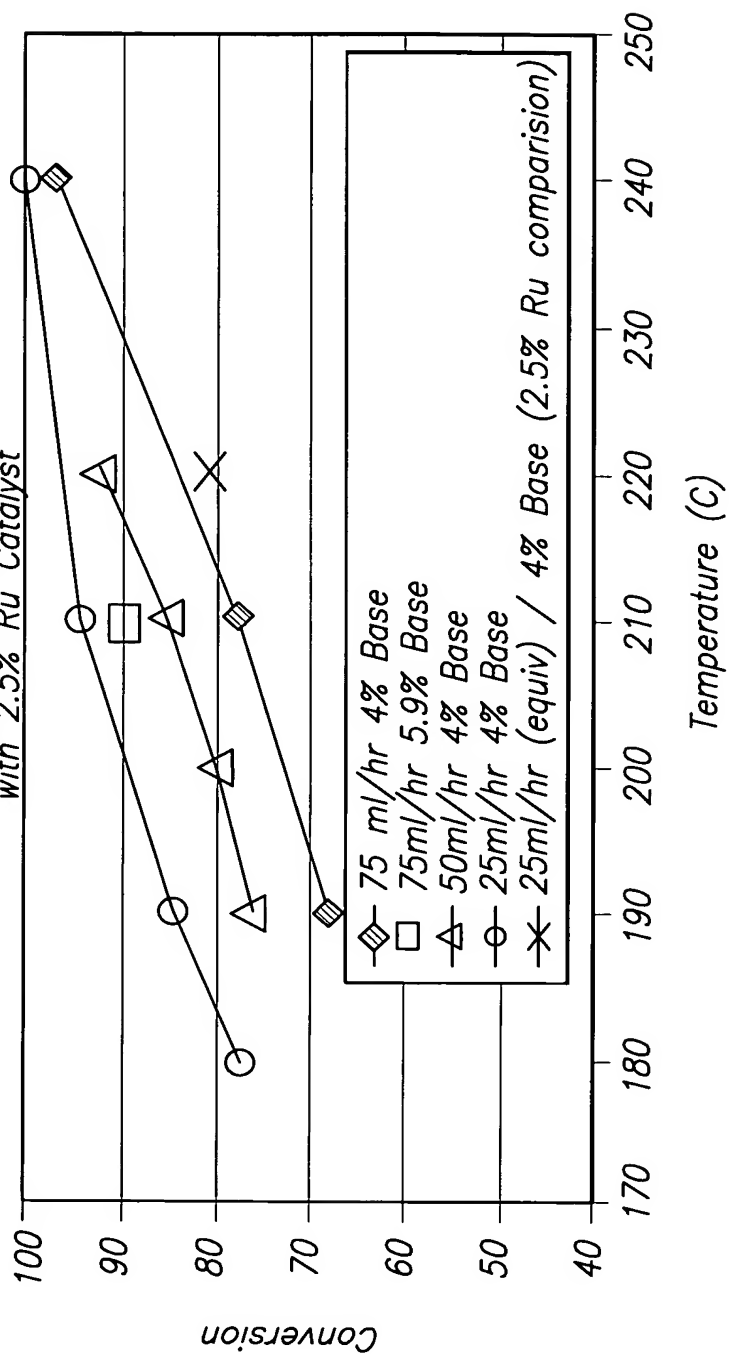


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Glycerol Flow Reactor Selectivity
Grouped by % NaOH (soln basis) and Flowrate
Carbon Molar Selectivity to PG

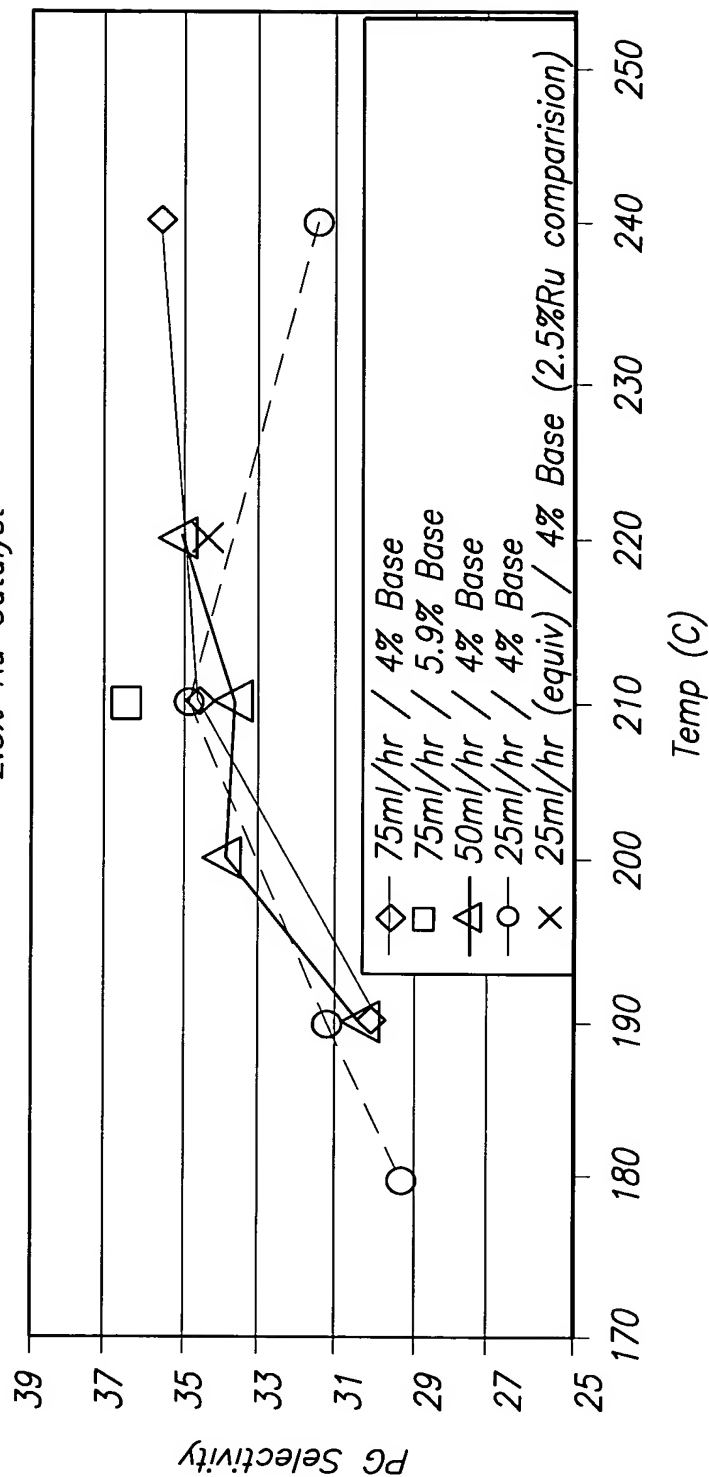


Conversion of Sorbitol
 2.5%Ni/2.5%Re on Calgon 120%CTC Carbon, 30cc Bed Flow Reactor, Flowrate as
 Indicated of 25%wt Sorbitol Feed + KOH, 5:1 Hydrogen Ratio, 1200psi, comparison
 with 2.5% Ru Catalyst

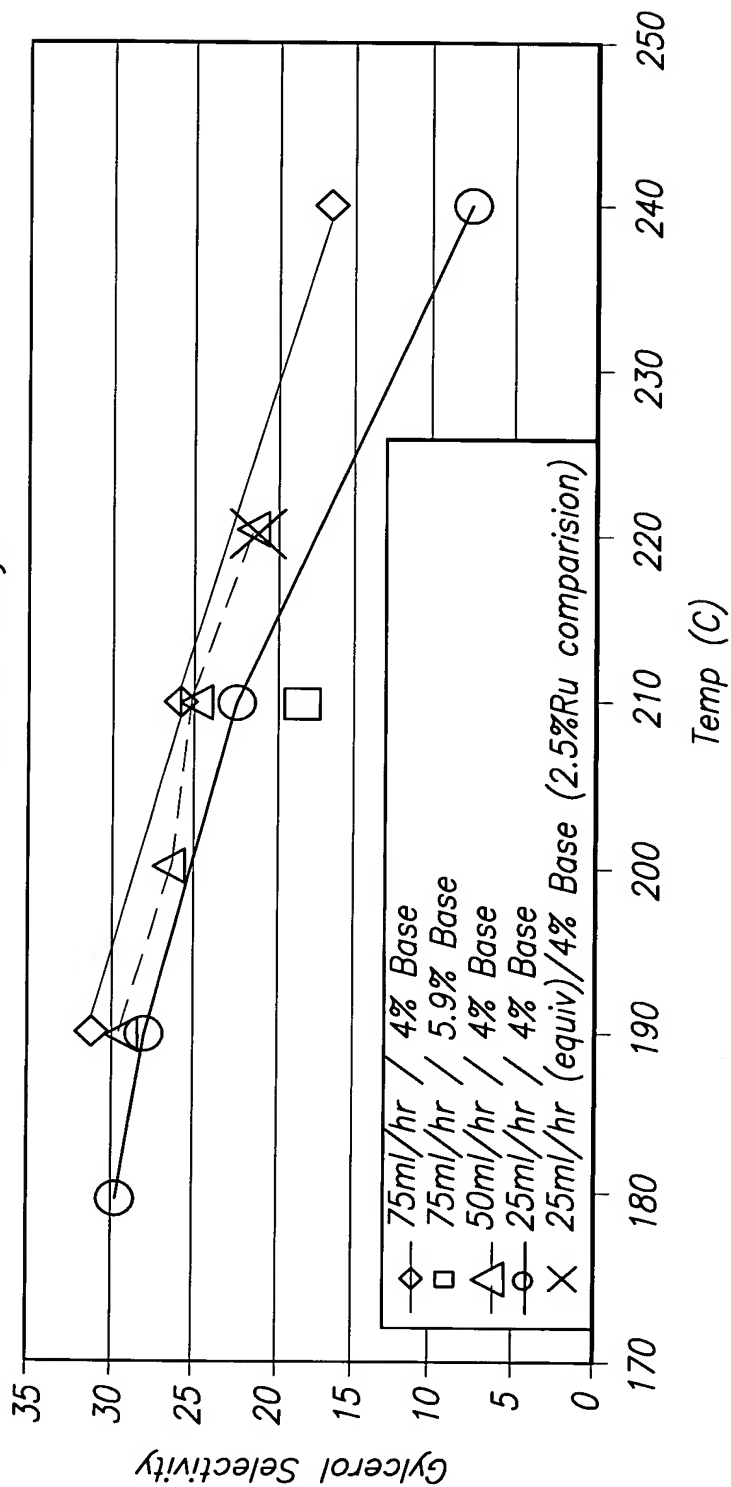


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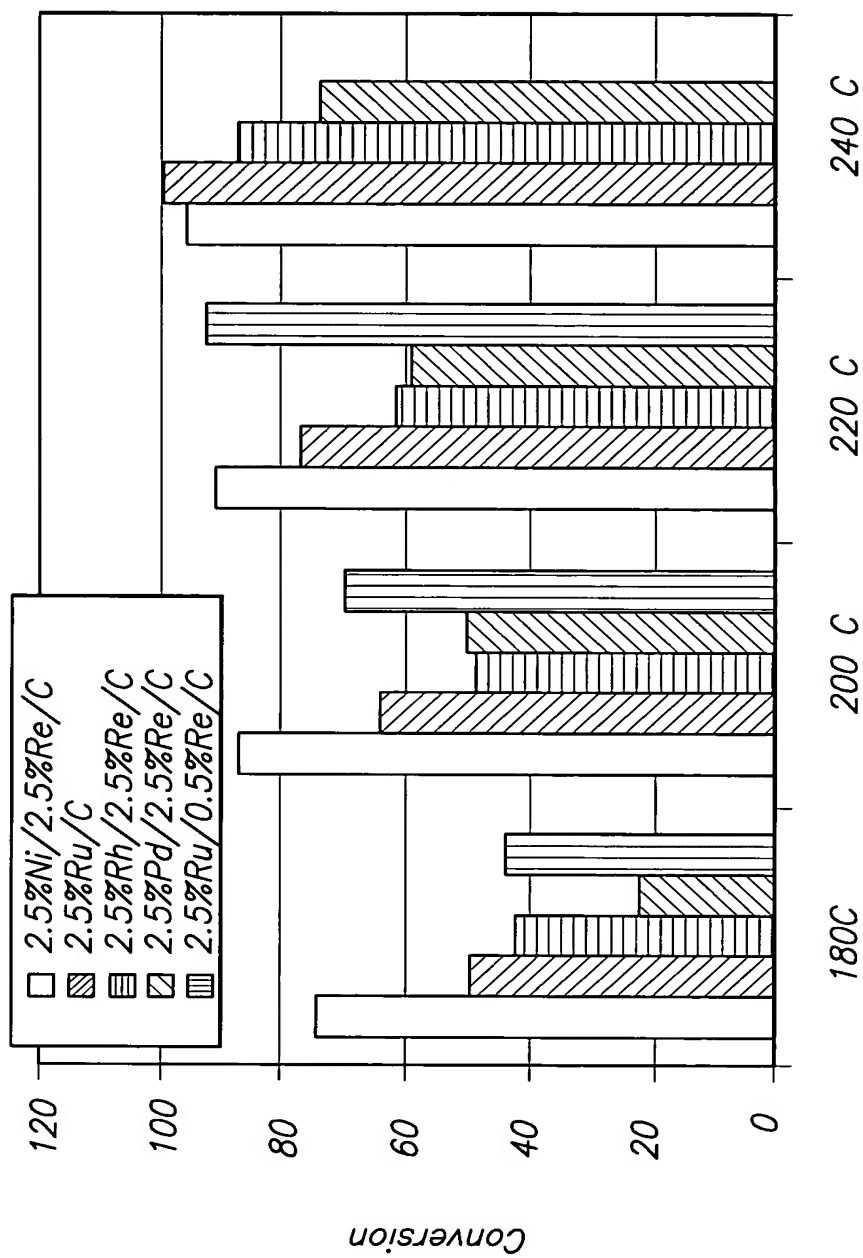
2.5%Ni/2.5%Re on Calgon 120% CTC Carbon, 30cc Bed Flow Reactor, Flowrates as indicated of 25%wt Sorbitol Feed + KOH, 5.1 Hydrogen Ratio, 120psi, compare with 2.5% Ru Catalyst



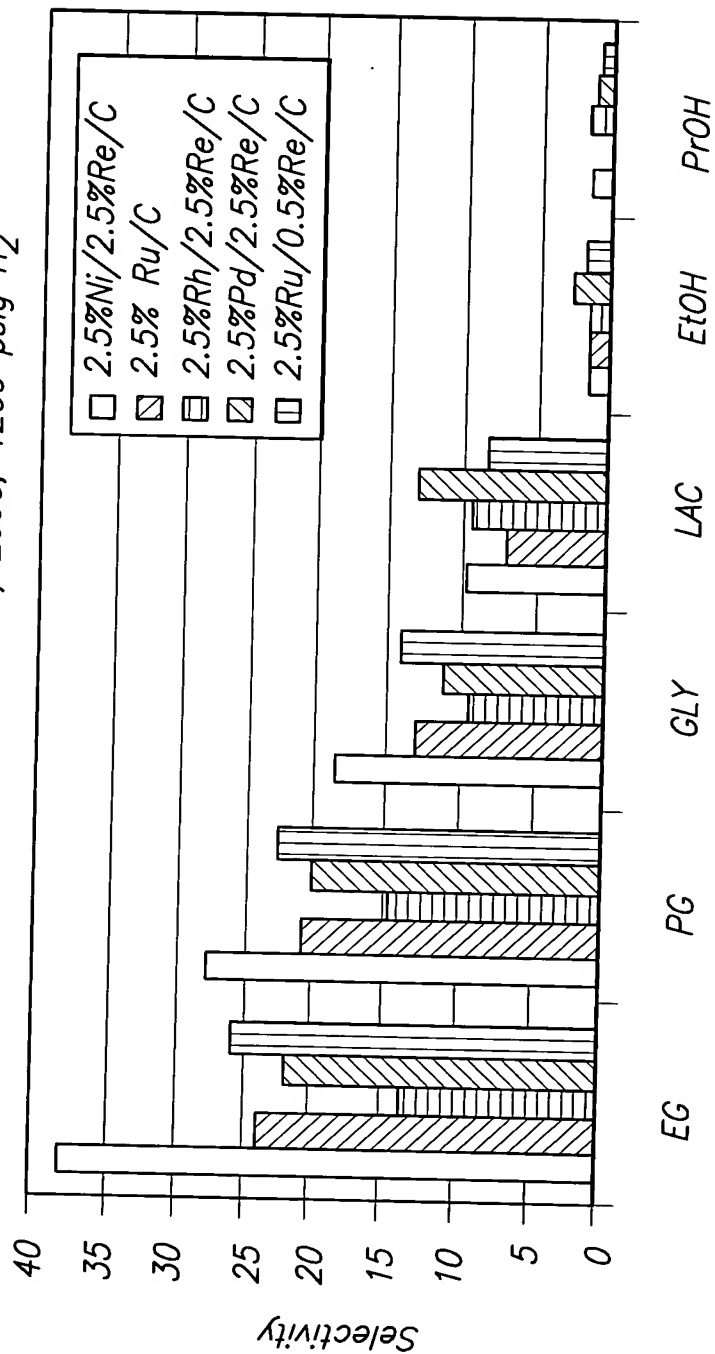
Selectivity to Glycerol from Sorbitol
 2.5%Ni/2.5%Re on Calgon 120%CTC Carbon, 30cc Bed Flow Reactor, Flowrate as
 indicated of 25%wt Sorbitol Feed + KOH, 5:1 Hydrogen Ratio, 1200psi, compare with
 2.5% Ru Catalyst



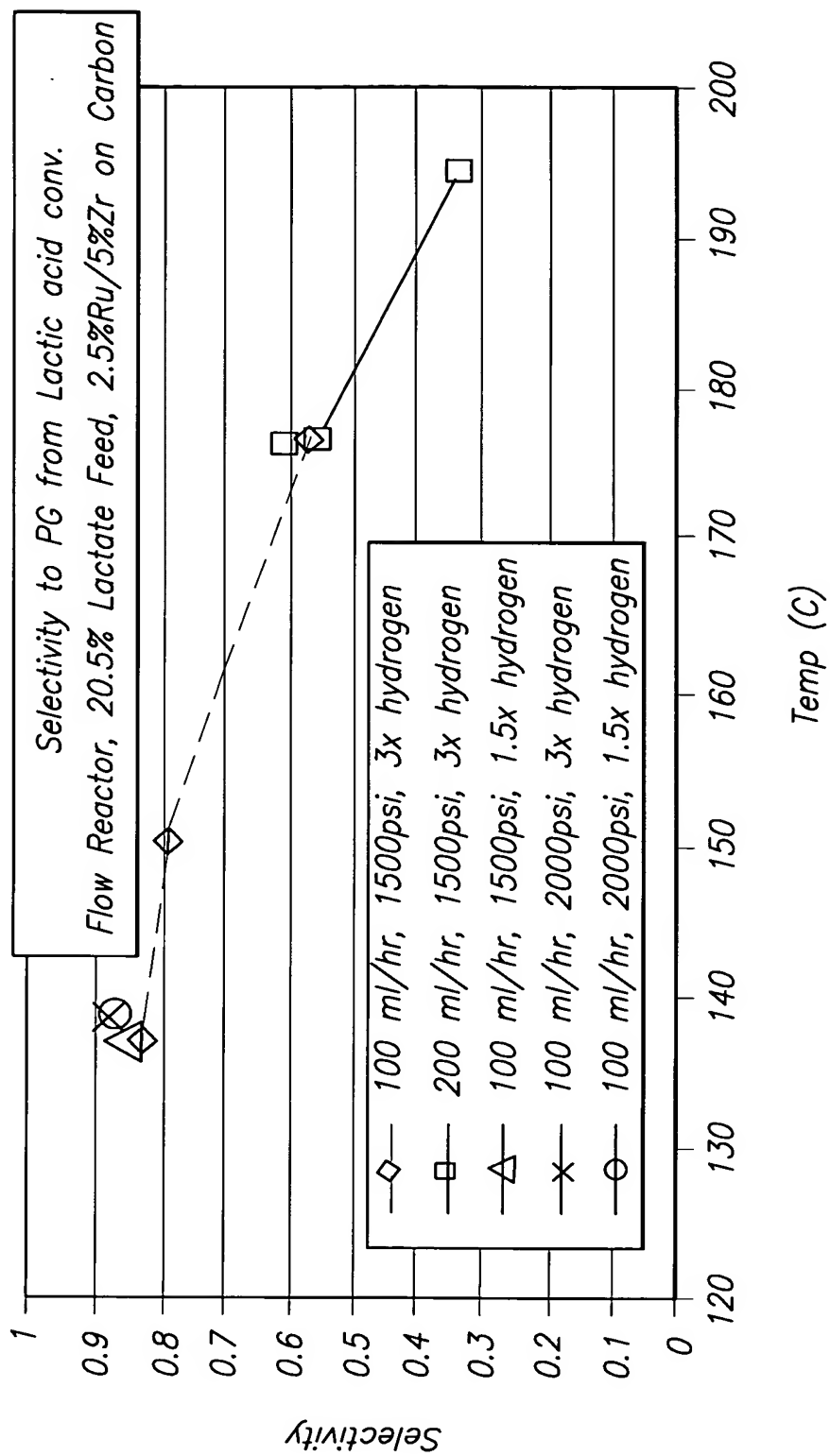
Comparison of Xylitol Conversion vs, Temperature
300cc Batch Reactor, 120psig H₂, 4-hour sample

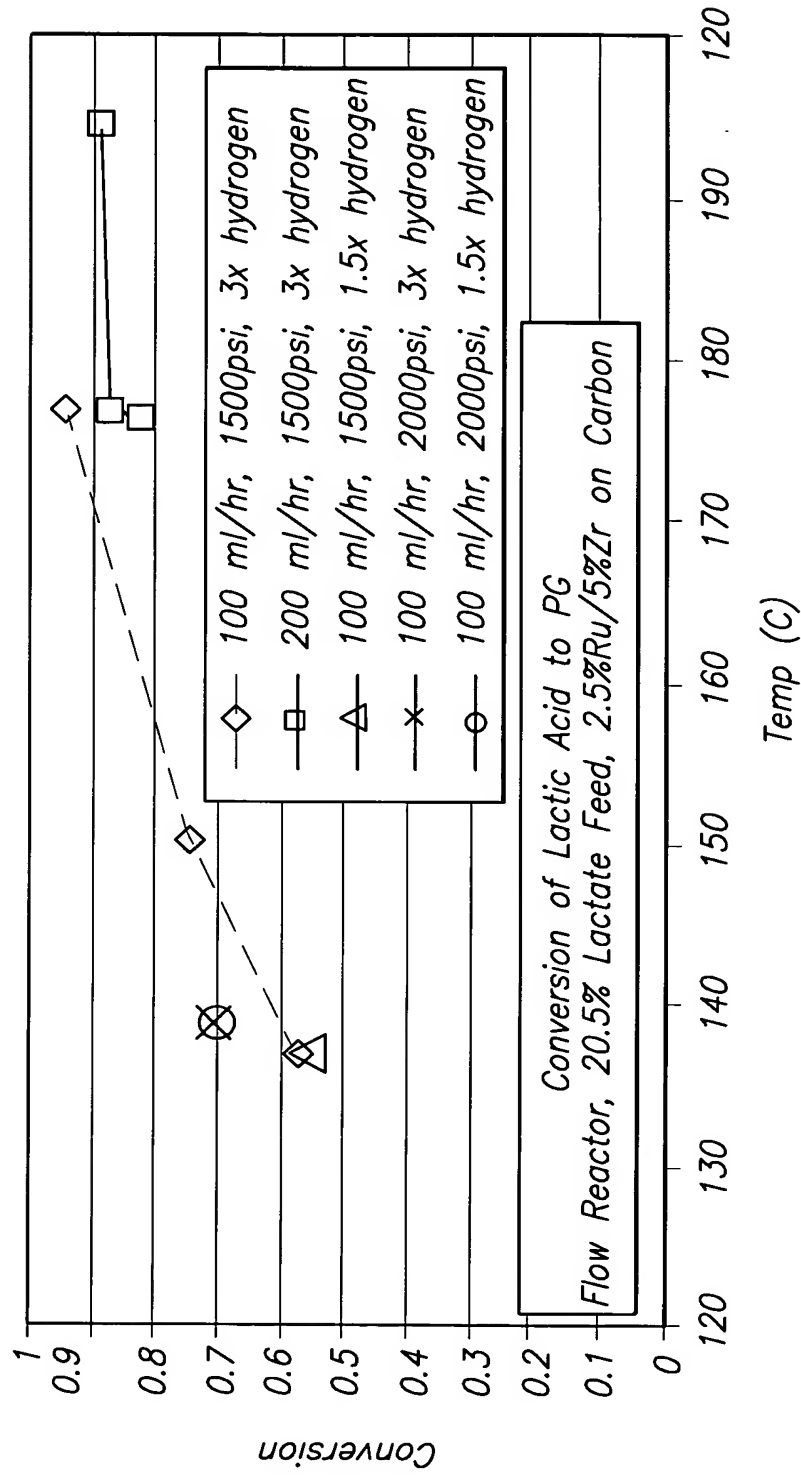


Comparison of Product Selectivity by Catalyst at
50% Xylitol Conversion
300cc Batch Reactor, 200C, 1200 psig H₂



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